

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (original) An isolated low-voltage supply source for a control circuit of a high-voltage load, in or upstream of a rectifying bridge, comprising:

a first low-voltage capacitor having a first electrode connected to one of the rectified output terminals of the bridge; and

at least one second capacitor providing said low voltage, a first electrode of the second capacitor being connected to one of the A.C. input terminals of the bridge, the respective second electrodes of the capacitors being connected by a high-voltage diode having its cathode connected to the second capacitor.

2. (currently amended) The circuit of claim 1, wherein the charging of the second capacitor occurs during a conduction period of the bridge when a ~~that of its~~ rectifying element of the bridge ~~s~~ which connects the respective first electrodes of the capacitors conducts, the first electrode of the second capacitor being connected to the one of the A.C. input terminals of the bridge having this element connecting the electrodes having the most negative potential.

3. (original) The circuit of claim 1, wherein the first capacitor is a capacitor of low-voltage supply of a circuit downstream of the bridge.

4. (original) The circuit of claim 1, comprising a second high-voltage diode having its anode connected, via a logic control switch, to the second electrode of the first capacitor, and having its cathode connected to a logic input terminal of the control circuit upstream of the bridge.

5. (original) The circuit of claim 1, wherein the rectifying bridge is a fullwave or three-phase bridge.

6. (original) The circuit of claim 1, wherein the bridge is a composite or controlled bridge.

7. (original) The circuit of claim 6, wherein said load is formed of at least one of the rectifying elements of the bridge.

8. (original) The circuit of claim 1, wherein the first capacitor is charged by an auxiliary winding of a transformer of a switched-mode power supply downstream of the bridge.

9. (currently amended) A power supply, comprising:
first and second input nodes operable to receive an AC voltage;
first and second output nodes operable to provide a rectified voltage;
a circuit having a first node coupled to one of the input nodes and having a second node;
a first capacitor having a first node coupled to one of the output nodes and having a second node;
a second capacitor having a first node coupled ~~operable to provide a signal to the second node of the circuit~~ and having a second node coupled to one of the input nodes;
and
a first diode having first and second nodes respectively coupled to the second node of the first capacitor and to the first node of the second capacitor.

10. (original) The power supply of claim 9 wherein the circuit and the second capacitor are coupled to the same one of the input nodes.

11. (original) The power supply of claim 9, further comprising a full-wave rectifier coupled to the input nodes and to the output nodes.

12. (currently amended) A power supply, comprising:
first and second input nodes operable to receive an AC voltage;
first and second output nodes operable to provide a rectified voltage;
a circuit coupled to one of the input nodes;
a first capacitor having a first node coupled to one of the output nodes and
having a second node;
a second capacitor having a first node operable to provide a signal to the circuit
and having a second node coupled to one of the input nodes;
a first diode having first and second nodes respectively coupled to the second
node of the first capacitor and to the first node of the second capacitor;
~~The power supply of claim 9, further comprising:~~
a load coupled to one of the first and second input nodes;
a switch coupled to the load; and
wherein the circuit is operable to control the switch.

13. (currently amended) A power supply, comprising:
first and second input nodes operable to receive an AC voltage;
first and second output nodes operable to provide a rectified voltage;
a circuit coupled to one of the input nodes;
a first capacitor having a first node coupled to one of the output nodes and
having a second node;
a second capacitor having a first node operable to provide a signal to the circuit
and having a second node coupled to one of the input nodes;
a first diode having first and second nodes respectively coupled to the second
node of the first capacitor and to the first node of the second capacitor;
~~The power supply of claim 9, further comprising:~~

a full-wave rectifier coupled to the input nodes and to the output nodes and to the circuit; and

wherein the circuit is operable to control operation of the full-wave rectifier.

14. (currently amended) A power supply, comprising:
first and second input nodes operable to receive an AC voltage;
first and second output nodes operable to provide a rectified voltage;
a circuit coupled to one of the input nodes;
a first capacitor having a first node coupled to one of the output nodes and
having a second node;
a second capacitor having a first node operable to provide a signal to the circuit
and having a second node coupled to one of the input nodes;
a first diode having first and second nodes respectively coupled to the second
node of the first capacitor and to the first node of the second capacitor;
~~The power supply of claim 9, further comprising:~~
a third capacitor having a first node coupled to the circuit and having a second
node coupled to one of the input nodes; and
a second diode having a first node coupled to the first node of the third capacitor
and having a second node coupled to the second node of the first capacitor.

15. (currently amended) ~~The power supply of claim 9, further comprising a DC-~~
~~DC converter coupled to the output nodes and including a transformer winding coupled~~
~~to the second node of the first capacitor.~~

16. (currently amended) A power supply, comprising:
first and second input nodes operable to receive an AC voltage;
first and second output nodes operable to provide a rectified voltage;
a circuit coupled to one of the input nodes;

a first capacitor having a first node coupled to one of the output nodes and having a second node;

a second capacitor having a first node operable to provide a signal to the circuit and having a second node coupled to one of the input nodes; and

a first diode having an anode and a cathode respectively coupled to the second node of the first capacitor and to the first node of the second capacitor~~The power supply of claim 9 wherein the first and second nodes of the first diode respectively comprise a cathode and an anode of the diode.~~

17. (currently amended) A power supply, comprising:
first and second input nodes operable to receive an AC voltage;
first and second output nodes operable to provide a rectified voltage;
a circuit coupled to one of the input nodes;
a first capacitor having a first node coupled to one of the output nodes and having a second node;
a second capacitor having a first node operable to provide a signal to the circuit and having a second node coupled to one of the input nodes;
a first diode having first and second nodes respectively coupled to the second node of the first capacitor and to the first node of the second capacitor; and

~~The power supply of claim 9, further comprising a rectifier coupled to the input nodes and to the output nodes and including a second diode coupled between the respective first node of the first capacitor and the second nodes of the first and second capacitors.~~

18. (currently amended) A power supply, comprising:
first and second input nodes operable to receive an AC voltage;
first and second output nodes operable to provide a rectified voltage;
a circuit coupled to one of the input nodes;
a first capacitor having a first node coupled to one of the output nodes and having a second node;

a second capacitor having a first node operable to provide a signal to the circuit and having a second node coupled to one of the input nodes; and

a first diode having first and second nodes respectively coupled to the second node of the first capacitor and to the first node of the second capacitor; and

~~The power supply of claim 9, further comprising a rectifier coupled to the input nodes and to the output nodes and including a second diode having a cathode coupled to the second node of the second capacitor and having an anode coupled to the first node of the first capacitor.~~

19. (currently amended) A method, comprising:

charging a second capacitor with a first capacitor when a first input node is positive relative to a second input node, the second capacitor having a first node coupled to a first node of the first capacitor and having a second node bidirectionally coupled to the second input node, the first capacitor having a second node coupled to an output node of a rectifier that is coupled to the first and second input nodes; and

electrically isolating the first node of the first capacitor from the first node of the second capacitor when the first input node is negative relative to the second input node.

20. (original) The method of claim 19, further comprising powering with the first capacitor a circuit coupled to one of the input nodes.

21. (currently amended) A method, comprising:

charging a second capacitor with a first capacitor when a first input node is positive relative to a second input node, the second capacitor having a first node coupled to a first node of the first capacitor and having a second node coupled to the second input node, the first capacitor having a second node coupled to an output node of a rectifier that is coupled to the first and second input nodes;

electrically isolating the first capacitor from the second capacitor when the first input node is negative relative to the second input node;

~~The method of claim 19 wherein:~~

wherein charging the first capacitor comprises forward biasing a diode that is coupled between the respective first nodes of the first and second capacitors; and

wherein electrically isolating the first capacitor from the second capacitor comprises reverse biasing the diode.